SQUADRON OFFICER COLLEGE

AIR UNIVERSITY

AIR FORCE INNOVATION OFFICE

SQUADRON OFFICER SCHOOL 14B

THINK TANK GROUP 1

Capt Curtis Wilson

Capt Leandros Fugate

Capt Michael LaSorda

Capt Colin McDonald

Capt Stephen Grabo

Capt Bryan Hladik

Capt Ben Fecteau

Capt Kevin Nastasi

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Executive Overview

According to the 2013 USAF Vision Statement, the Air Force is "Powered by Airman, Fueled by Innovation". In order to meet this Vision, we propose that a new institution is developed; a Wing-level innovation office. This office will serve as the one-stop shop between airman and innovation programs, mentoring airman on how to investigate and propose innovation ideas, and ensuring that ideas are considered in a timely manner.

There are four core barriers to innovation of which the innovation office must overcome: no single point of entry for ideas, inadequate advertisement, ineffective incentives, and bureaucratic complexities.

The first barrier of not having a focal point that can identify appropriate programs for idea submission happened to a think tank group member this past summer. The former AETC/CC, Gen Rice, coined the idea of "C3 – Cost Conscious Culture." While the member was briefing the general this past summer on a new scheduling process that significantly increased his squadron's sortie production rate, Gen Rice asked if the member had input the idea into the C3 database. No one in the room was aware that such a database existed, much less how to access it.

An example of inadequate advertising of innovation programs was also found amongst the think tank group. Out of eight CGOs, with collective experience spans over 20 bases and four AFSCs, none of the think tank members had ever had contact with an innovation program rep (IDEA, AFSO21, ETC…) prior to SOS, in some cases not even knowing programs existed.

Ineffective incentives also deter Airmen from contributing to the Air Force's innovation programs. TSgt Travis Layman is an example of an Airman who rose above his peers and saw an idea through to the end. He submitted an idea via the IDEA program and after 3.5 years of

struggling, finally got his idea approved the day before the IDEA program was defunded. He saved the USAF $3.5M per year but only got a single EPR bullet for his efforts.

An example of a bureaucratic complexity comes from Capt Leandros Fugate. As an intelligence officer, he worked to help create a set of checklists and trackers based on A2 AFIs. The products were successful and were lauded by the IG team. He was then instructed to share his ideas with the MAJCOM A2I shop for dissemination. He attempted to contact them but could not get in touch with anyone. After several months, the products were finally accepted but no feedback was given.

The AETC Wing, which would establish and implement the first Innovation Office, was selected using a weighted sum decision matrix with five criteria, in descending order of priority: Mission Diversity, Community Resources, AF Diversity, Flying Wing, and Host Wing. Based on these criteria, the 12th FTW at Randolph AFB, was determined as the optimal choice.
The source of power for the office will be derived from an O-6 sponsor, we recommend the WG/CV. The innovation office should be located in WG HQ. The Chief Innovation Officer (CINO) is recommended to be an O-4 wing staff billet. We also recommend an Innovation Office NCIOC (ION) which will be an E-6+ and a re-purposed or dual hated civilian, preferably taken from the AFSO-21 office. Each squadron should nominate and provide a CGO or NCO (dependent on Sq mission) to serve as an Innovation Office Liaison. All of these positions combined will comprise the Wing Innovation Council. The CINO will be empowered to task the squadron liaisons to assist in fact finding/idea submission in the event that an innovative idea is submitted from their respective squadron.

The Wing Innovation Office will reap great benefits for the 12th FTW and the Air Force as a whole and we look forward to stories of success from its implementation.

Introduction

According to the 2013 USAF Vision Statement, the Air Force is "Powered by Airmen, Fueled by Innovation". However, several barriers were identified that hamper innovation in today's Air Force. In order to successfully overcome these barriers and meet the Vision Statement, we propose that a new institution is stood-up, a Wing-level innovation office. This office will serve as the one-stop shop between airman and current Air Force innovation programs, mentoring Airman on how to investigate and propose innovation ideas, and ensuring that good ideas are considered in a timely manner. This office will be staffed on a zero-base manning construct, led by at least an O-4, and, most critically, have the full backing of the Wing Vice Commander. The 12th FTW at Randolph AFB was selected as the best initial test case location.

Barriers to Innovation

SOS Class 14A Think Tank determined that there were four primary barriers to innovation in the Air Force today: no single point of entry for ideas, inadequate advertisement campaigns for current initiatives, ineffective grassroots campaigns, and bureaucratic complexities. From the pool of eight Air Force Company Grade Officers (CGOs), we determined that these barriers had merit and concrete examples were abundant. The eight CGOs that represented the source of these examples all come from different backgrounds and have different career fields within the Air Force. Each one has provided several examples in his career field to each one of the barriers to innovation. These examples and the mix of individuals in the pool make up an broad representation of the Air Force as a whole. Additionally, since each individual could provide at least two examples to each barrier, we determined that adherence to 14A's barriers to innovation was a logical course of action.

1. No Single Focal Point

The first concrete examples are for the concept that there is no single point of entry for innovative ideas. The first of these comes from Capt Bryan Hladik. This situation took place this past summer. The former AETC/CC Gen Rice coined the idea of "C3 – Cost Conscious Culture." While he was briefing Gen Rice on the C3 initiatives at Columbus AFB, the General asked Capt Hladik if he or anyone else had input any of the ideas into the C3 database. Neither Capt Hladik nor anyone he worked with was aware that such a database existed, much less how to access it. The lack of awareness of the C3 initiative was frustrating because he and another pilot had started a new scheduling process that significantly increased the T-38C SUPT sortie production rate without adding or using additional resources. There was no standardized way to share the idea with anyone else.

Classified information can impede submission without a focal point to manage the processes. The next example comes from Capt Curt Wilson. Capt Wilson created a concept for a third-party software interface with aircraft metadata to produce a HUD overlay in the RPA. This program has the potential to save the AF tens of millions of dollars and years worth of primary contractor-run R&D. However, the metadata formats that are used and new capabilities that are desired for integration are highly classified. He was forced to wait for his weapons officer to make time to discuss the idea. Even then he was unclear on how to rout the idea through MAJCOM channels. The high level of classification made using programs such as IDEA and "Every Dollar Counts" impossible.

2. Inadequate Advertisement

Inadequate advertisement remains another critical roadblock to innovation. One example of inadequate advertising of innovation programs is found amongst our own Think Tank group. Out of eight CGOs, none of us had ever had contact with an innovation program rep (IDEA, AFSO21, ETC…) prior to SOS. Our collective experience spans over 20 bases and supervised over 200 Airmen. With an initial lack of outreach combined with complex examples of end products, such as a complete AFSO21 form A3, it's no wonder that Airmen at all levels are intimidated into silence. They are unsure of where to turn. There is no formal relationship established between innovation program representatives and Airmen at the lowest (and arguably most critical) levels. It may be as simple as a misunderstanding of push vs. pull relationships for information. Airmen may want information on these programs pushed to them on a personal and easier to understand level whereas innovation program representative may be expecting interested and motivated Airmen to pull the necessary information from their centrally located office(s). This is just one way inadequate advertising acts as a barrier to innovation.

At bases such as Columbus AFB, where Capt Hladik was stationed, innovation has been solicited via a Wing awards program. Initially Airmen felt motivated that their ideas were garnering Wing-level recognition and support. It was also an effective way to get the word out that innovation was being sought after. In essence, it initially created a widely viewed advertising campaign for innovation. However, as time soon progressed, Airmen openly admitted that the selective and competitive nature of innovation awards program turned them off to contributing. They began to see it as yet another way to recognize a few good, sometimes political, ideas at the expense of many smaller yet equally viable ideas. It advertised to them that if you wanted to get any recognition you had to come up with a huge cost or manpower saving

idea. Many Airmen reported that their ideas were smaller in nature but still had large impacts on workplace production and morale. The program instilled to motivate innovation had served the opposite purpose; it had sent the wrong message to the Wing's Airmen and soon all but killed the innovation awards program. These both serve as specific examples of how inadequate advertising can deter Airmen from contributing to innovation programs.

3. Ineffective Incentives

Ineffective or de-incentivizing cultures also deter Airmen from contributing to the Air Force's innovation programs. Again looking at our Think Tank group's combined experiences, of the over 200 Airmen we have managed only one has submitted an idea to an innovation program. It was denied. The most common reasons given for not wanting to were "I have no time" and "I'm ignored anyways." It is no secret that our Airmen are being asked to do more with less in the current environment of fiscal limitations. The increased responsibility via additional duties and lower manning in many work centers has greatly decreased the down time our Airmen used to employ in comprehensive development of innovative solutions. When they are aware of how to submit ideas and find the time to develop them, they are often met with a "stay in your lane and spend your free time on tactical/mission related tasks" mentality. These factors combine to create an atmosphere where Airmen overwhelmingly never start the process of developing, submitting and following through on innovative ideas. They feel like they have failed before they have even begun. Of those rare few who overcome these mental roadblocks, some still face a tough road ahead…

TSgt Travis Layman is a shining example of an Airman who rose above his peers and saw an idea through to the end. He identified a need for a new process on how to remove the Propulsion

System Rocket Engine (PSRE) access door located on the Minuteman III Intercontinental Ballistic Missile after struggling to remove a cross threaded door. The initial process of the door removal was to utilize an easy out screw extractor. What he found was the process didn't work. In fact it did more damage than good and became dangerous as the size of the extractor had to increase to the point that it was damaging the safety arming device. This process took approximately three hours to complete. On his own initiative, he learned how to use a CAD program and designed a more effective spanner wrench. He used the prototype several times and found that it cut the time for door removal from three hours down to 20 minutes. He formally submitted the idea to the 91 MW Technical Engineering department located at Minot AFB and requested an approval for fielding the prototype and approval for the instructions on how to use the item. The engineers determined that it was a more reliable and more efficient way to do this job and approved the request and the item was immediately fielded for Minot AFB. He then called units located at F.E. Warren AFB Wyoming, and Malmstrom AFB, Montana and asked if they experienced the same issue. They informed him that they indeed had the same issue and they were looking for a fix. TSgt Layman then contacted 20th Air Force, F. E. Warren AFB and requested an immediate change to the technical order (T.O.) governing the removal process by submitting an AFTO form 22.

After submitting this idea in 2010 there was constant positive feedback on the design and operation. The 20th AF evaluation team sent the prototype to Hill AFB for strength verification. Hill AFB didn't know how to process the information and between 20th AF and Hill AFB there were internal questions on funding, production, and approval. The entire process took three years. He finally received the official fielding, funding, and guidance on June 29, 2013. When he attempted to submit the idea via the IDEA program on 2 July 2013, he was informed the

IDEA program was suspended indefinitely and would be unable to receive any acknowledgement or monetary reward for the idea. He was only able to use it as a bullet on an EPR. The entire process was demotivating in that even though a few teams now enjoy a much simpler and expedited door extraction, the AF as a whole didn't acknowledge the contribution of savings to the tune of $3.7M a year across three operational wings and three research and development bases. TSgt Layman's extreme self motivation is an exception that proves the rule, illustrating how inadequate incentives are a roadblock to innovation

4. Bureaucratic Complexities

One of the most common barriers to innovation that the eight CGOs in this group determined was the bureaucratic complexities. Each CGO had at least two examples with more provided to him by subordinates. The first example of a bureaucratic complexity happened last year at Columbus AFB. The 50th FTS had changed over to 100% electronic scheduling. The scheduling program also integrated the flying hour program, student gradebooks, and flight currencies (among other things). Despite these changes, the contract maintenance supervisors refused to change their scheduling processes because they claimed it was not in their contract and this is the way they have always done things. The result is a duplication of efforts by the scheduling personnel. They have to generate a schedule for the squadron in an AF standardized program, and then generate an obsolete Excel product that the contractor wants. Attempts to change the process were bogged down in bureaucratic complexities involving the contractor and squadron. The discussions with the contractor continue today.

The next example comes from Capt Leandros Fugate. As an intelligence officer, he worked to help create a set of checklists and trackers based on A2 AFIs. The products were successful and were even lauded by the IG team. He was then instructed to share his ideas with the

MAJCOM A2I shop for dissemination. He attempted to contact them but could not get in touch with anyone. After several months, the products were finally accepted but no feedback was given. The complexities between his shop and the MAJCOM A2I office prevented an innovative product from being disseminated and used by others for a significant amount of time.

Host Wing

The SOS Think Tank was tasked to propose a single AETC Wing, in which the first Innovation Office (INO) would be established to gauge the effectiveness of such an organization prior to implementing an Air Force-wide initiative. Group One utilized a weighted sum decision matrix, consisting of five criteria, to select the optimal unit from a list of sixteen AETC Wings. Based on the criteria, their weightings, and the scores given for each Wing, the 12th FTW at Randolph AFB was selected to implement the first INO.

The criteria and their weightings were chosen to delineate Wings by their intellectual and experiential diversity, as well as their influence on financially impactful Air Force functions. The five criteria, in descending order of priority were: Mission Diversity (30%), Community Resources (30%), Total Force Diversity (20%), Flying Wing (15%), and Host Wing (5%). For each criterion, a Wing was awarded zero to one point, or a predetermined fraction of a point, depending on how the criterion is measured.

Mission Diversity, Community Resources, and Total Force Diversity collectively represented 80% of each Wing's total score because these criteria characterize the Wing's potential for diverse perspectives and expertise. These attributes, in turn, enable innovation through the availability of different ideas and solutions to complex problems.

1. Mission Diversity characterizes a Wings access to different, independent missions on the host Base. This criterion was measured using the number of independent USAF missions located on the Base. A Base with one mission, such as training, was awarded zero points. A half of a point was given to Wings with two to three missions on their Base. One point was given to Wings on bases with four or more missions. For this analysis, the Wings at Lackland AFB and Randolph AFB were considered part of a single Base: Joint Base San Antonio.
2. For the Community Resources criterion, external analyses were used as a baseline to measure each Wing's access to a diverse local economy. Wings with access to a complex and established local economy could engage contractors and commercial enterprises for additional expertise and insights. The diversity of the local economy was scored according to the 2013 Forbes Magazine's Top 200 Best Places for Business and Careers, which ranked the 200 largest metropolitan areas in the United States based on twelve metrics. These metrics included job growth, cost of living and business, income growth, educational attainment, and project economic growth through 2014 (Forbes, 2013). If a Wing's local city was not on the Forbes list, it earned zero point for the criterion. 0.25 points were given to Wing's with local cities that ranked in between 151 and 200. 0.5 points were awarded for local cities in the 101-150 range. 0.75 points were awarded for local cities in the 51-100 range. Lastly, one point was given for local cities that ranked in the top 50 on the 2013 Forbes Top 200 List.
3. The Total Force Diversity criterion favored AETC Wings that were located on bases with the most diverse Active Duty, Civilian, Reserve, and Air National Guard

populations. Zero points were awarded to Wings with one type of Airman. 0.33 points were awarded to Wings on Bases with two types of personnel. 0.66 points were given to Wings with three of the four aforementioned types. One point was given to wings with all four types. Contractors were not considered in this criterion, as they would be accounted for in the Community Resources metric.

4. The Flying Wing criterion favored Wings with a flying mission. Flying Wings were desired because innovations in flying units would have the greatest impact on the annual Air Force Budget. In FY13, Operations and Maintenance (O&M), at $45B, accounted for the largest percentage of the Air Force budget, or roughly a third of the total budget (USAF, 2013, 41). The President's Budget for FY14 increases the O&M budget by approximately $1.5B (Air, 2013, 12). Of the total $46.5B for FY14, the largest apportionment goes to flying operations, at over $18B (Air, 2013, 13). Thus, flying operations account for roughly 39% of the overall O&M FY14 budget. The USAF-level impacts of innovation in a Flying Wing are multiplied when other budgetary categories that also exist in a Flying Wing are accounted for, to include military and civilian pay, housing, and military construction. The Flying Wing metric is a binary one, with one point given to Wings with a flying mission, and zero points going to Wings without.
5. The Host Wing criterion favored Wings that are the host units for their Bases. This status indicates an inherent ability to directly access Base and community populations. While the Host Wing criterion may improve innovation through access to diverse perspectives, it is not a clear necessity, which is why it received the lowest weight.

Based on these criteria, and the corresponding scores for each wing, an optimal choice was evident: the 12th FTW at Randolph AFB. It's location on Joint Base San Antonio gives it access to one of the most diverse military and commercial communities in the United States. Its flying mission also makes potential innovations more impactful for the overall US Air Force enterprise. The table below presents the results of the weighted sum analysis for all sixteen Wings.

	Flying Wing	Total Force Diversity	Mission Diversity	Community Resources	Host Wing?	TOTAL
Weights	0.15	0.2	0.3	0.3	0.05	1
12 FTW, Randolph AFB	**1**	**1**	**1**	**1**	**0**	**0.95**
502 ABW, Lackland AFB	0	1	1	1	1	0.85
59 MW, Lackland AFB	0	1	1	1	0	0.8
37 TW, Lackland AFB	0	1	1	1	0	0.8
314 AW, Little Rock AFB	1	1	0.5	1	0	0.8
58 SOW, Kirtland AFB	1	0.66	1	0.5	0	0.732
56 FW, Luke AFB	1	0.66	0	0.75	1	0.557
33 FW, Eglin AFB	1	0.33	1	0	0	0.516
81 TW, Keesler AFB	0	0.66	0.5	0	1	0.332
71 FTW, Vance AFB	1	0.66	0	0	1	0.332
Air University, Maxwell AFB	0	0.33	0.5	0.25	0	0.291
97th AMW, Altus AFB, OK	1	0.33	0	0	1	0.266
14 FTW, Columbus AFB	1	0.33	0	0	1	0.266
47 FTW, Laughlin AFB	1	0.33	0	0	1	0.266
82 TW, Sheppard AFB	1	0.33	0	0	1	0.266
17 TW, Goodfellow AFB	0	0.33	0	0	1	0.116

Innovation Office Functions

To set the future Innovation Office (INO) for success we have developed pre-described functions for the office to employ. The following is a set of basic functions for the INO to develop upon.

The first function will be to advertise INO functions. Base personnel must know of the office's existence in order to make contact. INO will be charged with ensuring Airmen recognize this program. Additionally, it is not to be masked in advertisement as a replacement of AFSO21, but a conduit for reaching AFSO21 and all other innovation programs.

The second function will be for INO to have open communication with wing organizations and the MAJCOM level. Developing and maintaining good relationships with base organizations will enhance INO's capability to accomplish tasks. The free flow will foster the greatest change for innovation to succeed.

The third function will be to act as the innovation focal point. This reiterates the point above that INO is not a mask to any current AF and/or DoD program. INO will bill itself as the one stop shop for all innovation ideas. This eliminates of confusion for Airmen and simplifies the process.

The fourth function for INO will be to enable airmen to submit ideas. This involves INO aiding the innovative idea from start to finish. INO will actively manage the idea to ensure the innovative idea is voiced to the proper avenue for successful change implementation.

The fifth function will be to solicit ideas from base organizations and/or individuals. Holding "town hall" like meetings creates the possibility of stimulating idea generation. It is

important for INO, during this meeting, to ensure it does not turn into a gripe session, or the value of the town hall diminishes.

The sixth function will be to recommend change by representing all innovative ideas submitted. It is important for INO staff to regard every submitted idea as important and necessary for the AF, as the INO office may not even understands its importance when first presented.

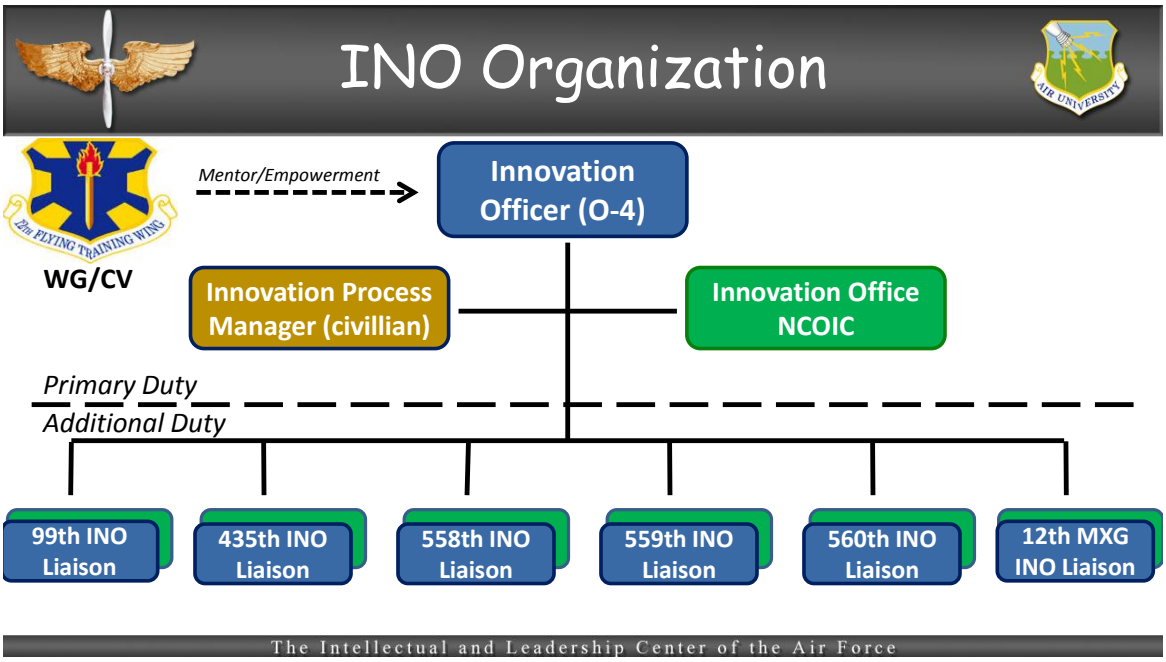
The final function will be to establish continuity and publish successes. Many ideas will take an extended period of time that may outlive many INO office members. It is essential to pass this information on to keep the innovative idea alive. In addition, publishing the successes not only lends credit to the innovator, but motivates others to submit their own ideas. This list of functions is only the basics and INO staff must actively engage its functions to highlight areas for improvement.

Innovation Office Manning

The personnel needed to run the wing innovation office can easily be populated under a zero based manning construct. The source of power for the office will be derived from an O-6 sponsor, most likely the WG/CV. We recommend the innovation office be co-located with the WG/CV in WG HQ. The Chief Innovation Officer (CINO) we recommend is an O-4 with at least 1 year time on station and 1 year before ADSC and VML eligibility (desired). The CINO position should be treated slightly above the level of precedence of a Squadron ADO and should be reserved for top performers expected to make the DO's list as well as Lt Col below the zone or in some cases already have a LtCol line. The CINO should be selected from one of the squadrons. Regardless of ADSC the most important criteria for selection should be the

reputation of the officer as a self starter and motivated individual. If a flyer is selected he or she should still maintain minimum currency in their platform. The reason we have deviated from the 14A plan of making the CINO position a graduated squadron commander is due to two reasons. One, we believe it is important for the culture of innovation to be instilled in future DOs and SQ/CCs through this tour before they take command. Second, a properly empowered Major is more than adequate to accomplish the functions of the CINO and can be selected from a larger pool of applicants in comparison to graduated SQ/CCs. Additionally, we recommend there be an Innovation Office NCOIC (ION) which will be an E-6 or above. The ION will be responsible for supporting the CINO through administrative function as well as being the back-up briefer/INO representative when the CINO is unavailable. The CINO and ION positions will be a one year primary duty assignment and will be filled by an on-loan officer/NCO from wing squadrons. The selection process will be competitive and the selectees will be determined by the WG/CV. In support of the CINO & ION we recommend a re-purposed or dual hatted civilian, preferably GS-12/13 taken from the AFSO-21 office. The civilian position will be permanent with the intended function of providing long-term continuity and serving as the process SME for submission, tracking, and feedback management of various AF innovation programs. Each squadron will nominate and provide a CGO or NCO (dependent on Sq mission) to serve as an Innovation Office Liaison. The Innovation Liaison position will be a part-time additional duty and will report directly to the SQ/CC and serve as the sounding board for innovative ideas for their squadrons. Just like the CINO we believe it is imperative for the squadron liaisons to be highly motivated self starters who will actively engage in the program. All of these positions combined will comprise the Wing Innovation Council. The CINO will be empowered to task the squadron liaisons to assist in fact finding/idea submission in the event that an innovative idea is

submitted from their respective squadron. The Innovation council will essentially be the CINO's pool of surge manning for help with complex or a high volume of tasks. The chart below is a visual representation of the INO office organization.



For Example, A hard-charging, highly-stratted Major is selected to from the 435th FTS to be the 12th FTW CINO. Concurrently a TSgt from the 12th OG SARM office is chosen as the Innovation office NCOIC. The INO is completed by dual-hatting a civilian from the 12th FTW AFSO-21 office. Each squadron commander chooses a motivated self starting Captain to serve as the squadrons INO liaison. In some cases the Captain may be dual tasked with additional duties in conjunction with the INO liaison position so long as the second duty is not a highly demanding position such as a member, but not chief, of the scheduling shop. The 558th would task a Captain RFC instructor as well as an Airman SO instructor to represent the enlisted troops of the squadron.

Conclusion

Chief of Staff of the Air Force General Mark Welsh wrote in the 2013 USAF Vision Statement, "Leaders should empower Airmen to think creatively, find new solutions, and make decisions." By creating and backing a Wing Innovation office that ensures adequate consideration for every Airman's idea, a WG/CC will encourage and empower their Airmen to innovate. An initial test INO will be implemented at the 12th FTW with a zero-base manning construct, and will have minimal staff training requirements to get the job done. This ensures the INO can be stood up efficiently in today's budget-constrained environment. The power of the INO ultimately comes from the passion of the Airmen manning it to create positive change in the Air Force and the full backing of the Wing Commander.

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Appendix 1

AFSO21 and Current Wing Innovation Office Lessons Learned

1. Lessons learned from interview with AFMC AFSO21 Representative, Ms. Lisa Coker

AFSO21 (or similar types of innovation/process improvement programs) have been implemented around the Air Force with mixed success. The largest factor for success has been local commander buy-in to the program. This buy-in is critical so that any innovation projects receive the necessary level of support to be followed through on. Rather than the credibility of the AFSO21 lead or representative themselves, the credibility comes from the commander backing the AFSO21 representatives and project results. This means that an innovation office lead could be of lower rank and still be effective.

Where AFSO21 programs have not been successful is when the local commander is "forced" either via policy or some sort of metrics. This rapidly degenerates the program into a "hunting to answer metrics" mode, where projects are started just to get the numbers up put don't actually fix anything. Also, to progress to "Green belt" or "Black belt" AFSO21 certifications requires participation in a certain number of events, which could lead to people proposing events just to get certified rather than for innovation. This creates extra work and can sour people towards AFSO21. Indeed, AFSO21 may already have this reputation for many people, and it might be advisable to change future innovation offices names to something that emphasizes innovation does not have to involve a lot of work, such as the "Process Improvement Office."

In AFMC, AFSO21 offices have had success with a few representatives that assist military members in executing AFSO21 projects. For instance, the AFSO21 Rep at Wright-Patterson AFB successfully mentored a Security Forces Squadron Superintendent in carrying out

an overhaul of base visitor entry procedures. This project was successful because it leveraged the AFSO21 representatives knowledge of process improvement, the knowledge of the problem by the team leader (the SF Supt.), and had O-6 buy-in to ensure the findings were acted upon. As a reward for successful completion of the project, the team leader received an AF Achievement Medal. This type of recognition appears to be effective in getting more people to volunteer projects.

Going forward AFSO21 could be associated with the Commanders Inspection Program (CCIP) which follows a similar 8-step process to AFSO21 to fix inspection discrepancies. This could go a long way in helping to normalize AFSO21 procedures. Also, since the CCIP was just recently stood up, perhaps some of those bodies could be duel hatted as performing innovation office duties if they are already similarly trained.

2. Information from interview with Capt Josh Carmer, member of the 45th Space Wing Innovation Office:

The 45th Space Wing is standing up a Wing Innovation Office in March, 2014 on the initiative of their Wing Commander. The office is completely staffed as an additional duty by 1-2 representatives (primarily CGO's) from every squadron and led by a Major and a Captain at the Wing level. Submission of ideas will be done through sharepoint. The office will ensure the appropriate command level and program (such as AFSO21) becomes involved with processing the ideas. The intent is that minor changes don't turn into huge projects needlessly. This will be rolled out initially with the Commander's Self-Inspection Program. The representatives in the office are mostly volunteers, and previous AFSO21 experience is valued. Any idea that is submitted will have to have some feedback returned to the submitter within 7 days.

3. Information from interview with Capt Mike Gitchell, member of the 6th Air Mobility Wing AFSO21 Office at MacDill AFB:

Success with innovation comes from building innovation into the culture. All new members of the 6th Air Mobility Wing go through 1 day AFSO21 "Yellow Belt" training, and it is known that innovation programs are a significant priority of the Wing Commander, who is an AFSO21 Black Belt. The Wing AFSO21 Office is staffed on a total force concept, led by a Major, a Reserve Major, a Captain, a Chief select, a SMSgt, and a MSgt. The office belongs to the Vice Wing Commander who holds weekly meetings, and the Wing Commander is also briefed biweekly on office activity.

Any rank can submit an idea to the Innovation Office, however, that idea must have the involvement of a "champion" who is high enough rank to make the decision on the idea (so a Squadron//CC for a Squadron level issue for instance). Rewards are not typically given out for successful innovation projects as innovating at work is considered everyone's duty. Metrics for success have to be picked carefully.

There is a lot of passion from the junior force, and while not everything becomes a full AFSO21 project, using AFSO21 concepts in just making minor changes have been rewarding to CGO's. Pushback does occur, and the office is still a work in progress, but prioritization from Wing leadership is what ultimately creates buy-in.

Appendix 2

Metrics for Success

Lessons learned from AFSO21 have shown that there are two critical attributes of a successful Innovation Office: selecting the right metrics of success, and committing to them once they are established. Commonly used, but ultimately unsuccessful metrics often track easily quantifiable statistics, such as the total cost-savings of proposed innovations, or the total number of proposed innovations. Unfortunately, these metrics have historically devolved into gamesmanship, where commanders establish quotas in an attempt to boost their measured success. The complications that arise from this tendency consequently stifle innovation. History has shown that many AFSO21 offices failed due to the resulting lack of interest.

Successful AFSO21 offices have almost unanimously maintained generalized metrics of success that focus on content and quality, over cost and quantity. While these metrics are indeed more difficult to objectively track, the AFSO21 offices that committed to them have thrived. The Innovation Office will take advantage of this crucial lesson-learned. The Think Tank proposes to measure success by way of a quarterly Wing-wide, or Base-wide innovation publication. This publication will push innovation by describing new Wing innovations, and praising the individuals who proposed them. Recognition of innovative individuals is historically one of the most powerful incentives for catalyzing further innovation. The publication will also pull innovation by asking Wing personnel to publish issues or challenges for which they cannot find a solution. Innovative individuals from other Groups in the Wing, or from other units on the Base, will be offer their ideas or insights, knowing that their innovative spirit will be publically praised in a future publication.

A quarterly publication can also serve as an objective metric of success if the Innovation Office measures the rate at which the publication grows. An Innovation Office's growth and influence in the Wing are evident if the number of innovations and issues published in each subsequent edition increase. Thus, the size of the quarterly publication is directly proportional to the pervasiveness of the Wing's innovative spirit.

Once again, it is vital that commanders at all levels of authority understand the purpose of, and commit to the quarterly publication. A key task for the Innovation Office, especially during the first year, will be to monitor and manage the Wing's adherence to the publication's intent. For the first, prototype Innovation Office, the Wing's acceptance of the quarterly publication will be ascertained after a predetermined trial period to validate the quarterly publication as a metric of success. If proven effective, the quarterly publication would become the baseline metric of success at all Innovation Offices.